

EPA Region 5 Records Ctr.



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Granville Site Technical Committee  
10805 Cahill Road  
Raleigh, NC 27614

**Via Express Mail**

April 7, 2003

Mr. Kevin Adler, Remedial Project Manager  
U.S. Environmental Protection Agency, Region 5  
Office of Superfund, Remedial & Enforcement Response Branch  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

**Subject: Granville Solvents Site Removal Action Quarterly Progress Report – First Quarter 2003**

Dear Mr. Adler:

I have enclosed two copies of the First Quarter 2003 Report for the Removal Action at the Granville Solvents Site on behalf of the Granville Solvents Site PRP Group. Copies have been sent to the following individuals:

1. Mr. Steve Acree, U.S. EPA
2. Mr. Fred Myers, Ohio EPA
3. Mr. Joe Hickman, Manager, Village of Granville

If you have any questions regarding this report, please contact me at (919) 668-3218.

Regards,

William S. Brewer, Ph.D.  
Granville Technical Committee Chair

cc: Peter Felitti, Regional Counsel, US EPA  
Ben Pfefferle, Chairman, GSS PRP Group  
Granville Technical Committee  
J. Peeples, Metcalf & Eddy  
T. Struttman, Sharp & Associates

**GRANVILLE SOLVENTS SITE  
REMOVAL ACTION QUARTERLY REPORT  
FOR JANUARY, FEBRUARY and MARCH, 2003**

4/17/03  
KA.

**APRIL 2003**

Pursuant to the requirement set forth in the Administrative Order by Consent (AOC, September 7, 1994) between the U.S. EPA and the Granville Solvents Site (GSS) Potentially Responsible Parties (PRP) Group, in Section 2.5 – Reporting, and in a letter dated November 14, 1996, from Ms. Diane Spencer (U.S. EPA), this report constitutes the quarterly written progress report concerning actions undertaken pursuant to the AOC.

**I. PROGRESS MADE DURING REPORTING PERIOD**

Source Area Groundwater Control

The groundwater pumping and treatment system operated 732 hours in January, 672 hours in February, and 744 hours in March, for a total of 2,148 hours (99.44% of the total hours available) during the first quarter of 2003. Since operation of the treatment system began in December 1994, the system has been operating over 98.8% of the available time.

During the first quarter of 2003, the treatment system processed approximately 10.3 million gallons of water in January, 10.7 million gallons of water in February, and 11.4 million gallons of water in March for a total of 32.4 million gallons of water for the quarter. Since operation began in December 1994, the system has processed more than 980.64 million gallons of water.

*During the first quarter of 2003, Metcalf & Eddy collected monthly air pressure measurements in the air-stripping unit's exhaust duct to calculate airflow values. The airflow rate during the month of January averaged 2410 cfm, 2361 cfm in February, and 2164 cfm in March. Acid washing of the treatment system had been completed in January.*

M&E continued to perform scheduled monthly maintenance on the treatment system to ensure that the system is performing at maximum efficiency with decreased unscheduled downtime. Maintenance included replacing bag filters, lubricating the transfer pump and blower motors, and maintaining the flow meters and level sensors.

Water samples were collected from the system's influent and effluent sampling ports on January 15, February 11, and March 21, 2003. Analytical results are listed in Table 1.

Extraction well GSS-EW1 was operated at an average flow rate of approximately 110 gallons per minute (gpm) during the first quarter of 2003. GSS-EW2 was operated at an average flow rate of approximately 141 gallons per minute (gpm) during the period. The total pumping rate from the two wells averaged 251.33 gpm for the first quarter of 2003 – 234 gpm for the month of January, 265 gpm for the month of February, and 255 gpm for the month of March. Based on the pumping rates above, total VOCs or approximately 0.16 lb/day in January, 0.16 lb/day in February, and 0.18 lb/day in March were discharged to the atmosphere during this reporting period.

**TABLE 1**

VOCs	Influent January 15	Effluent January 15	Influent February 11	Effluent February 11	Influent March 21	Effluent March 21
1,1,1-trichloroethane	13.2 µg/l	ND	11.6 µg/l	ND	12.0 µg/l	ND
Cis-1,2-dichloroethene	3.1 µg/l	ND	2.7 µg/l	ND	2.7 µg/l	ND
Tetrachloroethene	13.8 µg/l	ND	15.2 µg/l	ND	13.0 µg/l	ND
Trichloroethene	15.5 µg/l	ND	14.8 µg/l	ND	18.0 µg/l	ND
1,1-dichloroethylene	ND	ND	ND	ND	ND	ND

#### Groundwater Monitoring Plan

Groundwater level measurements were collected on January 15 and February 11, 2003. These data were used to develop potentiometric surface maps with the map developed with the February 11, 2003 data attached to this report.

Quarterly groundwater samples were collected on February 26, 2003 from selected wells in the monitoring well network.

#### Source Area Soils

Sharp and Associates, Inc. (SHARP) continued operation of the air injection/air sparging/ and soil vapor extraction (AI/AS/SVE) system during the first quarter of 2003. Through February 23, 2003, approximately 238 pounds of total VOCs (based upon SUMMA data results and PID readings) have been removed with the SVE/AS/AI system. Mass removal estimates were based on PID readings that have been corrected after data from SUMMA canister samples collected on September 27, 2002 were analyzed. Target compounds detected are listed below in Table 2. The removal rate has been maintained well below the de minimis value of 10 lb/day throughout the quarter.

**TABLE 2**

Constituent Detected in Summa Canister	ug/m <sup>3</sup>
1,1-Dichloroethane	19*
cis-1,2-Dichloroethene	110
1,1,1,-Trichloroethane	3,600
Trichloroethene	5,700
Tetrachloroethene	5,100

**NOTES:**

\* Represents qualified data.

1,1-Dichloroethane was J-qualified. The reported value is considered an estimate as it is below the reporting limit

System maintenance followed procedures outlined in the Removal Action Operations and Maintenance Manual (Sharp, October 26, 2001). The SVE blower that had failed in November 2002 was replaced on January 22, 2003. The air sparging compressor motor that had failed in December 2002 was rebuilt and put back on line on January 22, 2003.

#### Active or Completed Tasks

The following specific tasks were completed during the reporting period:

- Water samples were collected from the groundwater treatment system influent and effluent sampling ports on January 15, February 11 and March 11, 2003.
- Water level measurements were made on January 15 and February 11, 2003.
- Groundwater treatment system airflow data was collected.
- The quarterly suite of groundwater samples was collected from the monitoring well network on February 26, 2003.
- An SVE blower (#1) went down in November 2002, but the SVE/AS system continued to operate by switching to SVE blower # 2. A replacement blower was backordered and on January 22, 2003 a new blower was installed to replace blower # 1.
- The air injection system is operating on a 12-hour on/12-hour off cycle.
- The air sparging system compressor motor that had failed on December 5, 2002 was rebuilt and placed back on line on January 22, 2003.

## II. DELIVERABLES (CURRENT PERIOD AND NEXT PERIOD)

### **Current Period:**

<u>Deliverable</u>	<u>Due Date</u>	<u>Delivered</u>
Quarterly Report	April 7, 2003	April 7, 2003

### **Next Period:**

<u>Deliverable</u>	<u>Due Date</u>
Quarterly Report	July 7, 2003

## III. DIFFICULTIES ENCOUNTERED & RESPONSE ACTIONS TAKEN THIS PERIOD

- Replaced clogged Shallow Trey Demister on the air stripper.
- SVE blower # 1 was down until January 22, 2003. SVE blower # 2 remained in operation until blower # 1 was replaced on January 22, 2003.
- The air sparging compressor motor that had faulted on December 5, 2002 was repaired and placed back on line on January 22, 2003.

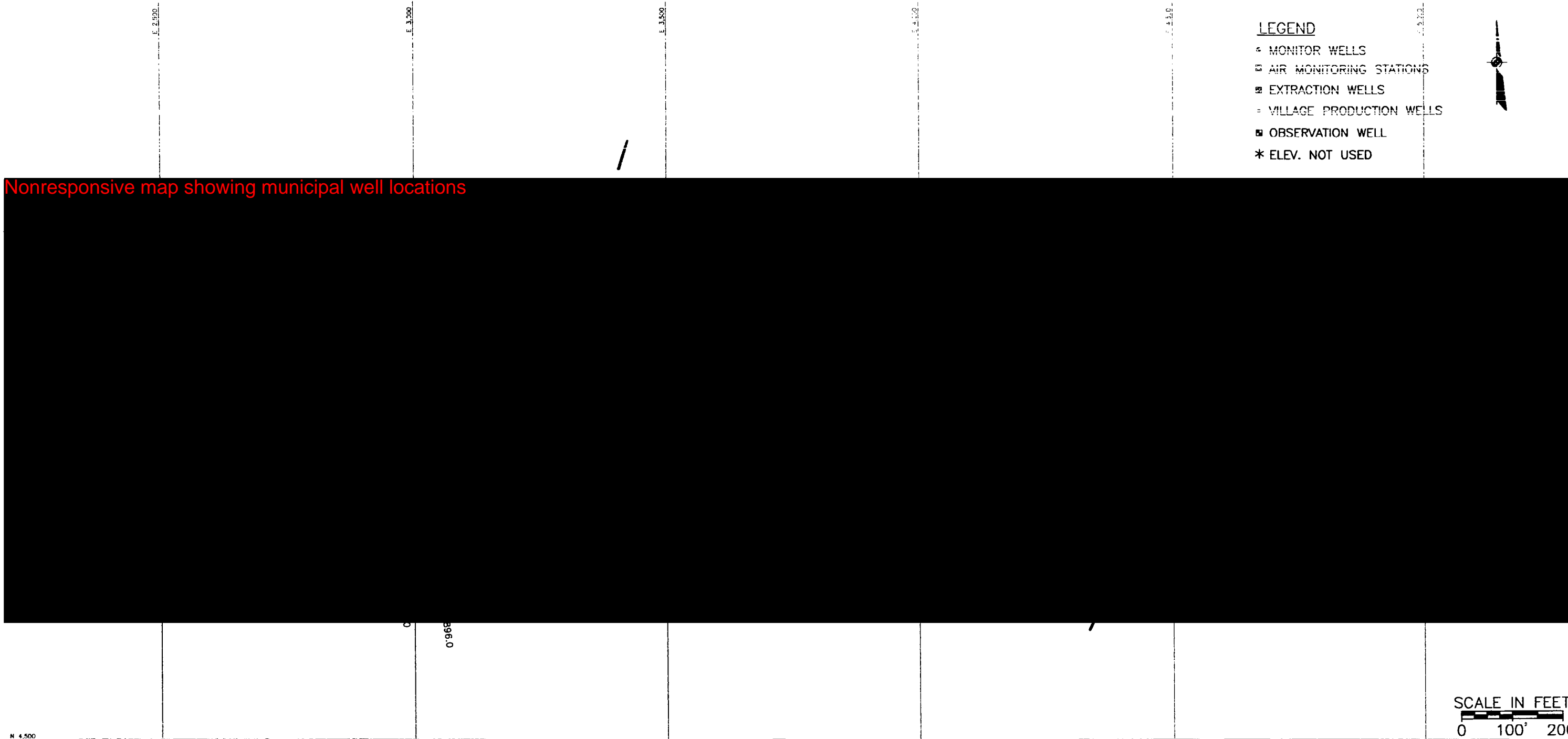
#### IV. ANTICIPATED ACTIVITIES DURING NEXT REPORTING PERIOD

During the next reporting period, the following tasks will be performed:

- Potentiometric surface data will be collected on a quarterly basis.
- Sample the groundwater treatment system influent and effluent water on a monthly basis.
- Perform scheduled maintenance of the groundwater treatment system
- Collect the annual suite of samples from the groundwater-monitoring network. — check GW
- Acid wash the Shallow Tray air stripper system.
- Continued operation, maintenance, and monitoring of the SVE, AS, and AI systems.
- Collect whole air sample.

contam. plume  
extent  
vs. potent.  
surface.

— recommend  
HRC/ORC use  
to speed up  
gw cleanup.



N 4,500

0'968

SCALE IN FEET  
0 100' 200'

**M&E** Metcalf & Eddy

GRANVILLE SOLVENTS SITE  
POTENTIOMETRIC SURFACE  
FEBRUARY 12, 2003  
GRANVILLE, OHIO

FILE NAME	CHECKED	DRAWN	DATE	PROJECT NO.	FIGURE
POTFEB03	JP	JAW	—	016688	1